CLAIMS:

1. An internal chill casting method for manufacturing an aluminum cast product enclosing a pipe inserted therein, which comprises the steps of:

projecting a controlling member into a cavity of a mold;

arranging a pipe at a predetermined position in said cavity of said mold;

holding said pipe in said cavity by insertion of said controlling member into at least one opening of said pipe or insertion of at least one end of said pipe into a hole of said controlling member; and

pouring a molten aluminum alloy into said cavity so as to enclose said pipe with said aluminum alloy.

2. The method defined in Claim 1, wherein said controlling member is adjustably provided toward a center of the cavity.

3. The method defined in Claim 1, wherein the controlling member has a tip inserted to the opening of the pipe.

4. The method defined in Claim 3, wherein the controlling member is stepped at a middle part toward the tip.

5. The method defined in Claim 3, wherein the pipe has the opening whose inner surface is chamfered.

6. The method defined in Claim 1, wherein the controlling member has a hole to which an end of the pipe is inserted.

7. The method defined in Claim 1, wherein the controlling member has a surface layer which endures a high-temperature atmosphere caused by pouring the molten aluminum alloy.

8. An internal chill casting method for production of an aluminum cast product enclosing a pipe therein, which comprises the steps of:

coupling a bracket having a hole to a pipe;

arranging said pipe at a predetermined position in a cavity of a mold;

holding said pipe in said cavity by inserting a controlling pin, which extends through a wall of the mold to the said cavity, into said hole of said

bracket; and

pouring a molten aluminum alloy into said cavity so as to enclose said pipe with said aluminum alloy.

9. The method defined in Claims 1 or 8, wherein compressed gas is supplied to the pipe during pouring the molten aluminum alloy.

10. The method defined in Claims 1 or 8, wherein a plug is attached to an open end of the pipe.